

DOP 150

SUBMERSIBLE DREDGE PUMP

A hydraulically driven, submersible dredge pump with wear resistant pump parts. The construction details are as follows.

Dimensions	: Suction diameter	: 150 mm
	Discharge connection diameter	: 180 mm
	Flange dimensions	: OD 340 mm; PCD 295 mm, 8x Ø22
	Impeller diameter (vanes)	: 405 mm
	Width in the impeller	: 100 mm
	Spherical pump passage	: 77 mm
Materials	: Pump casing	: Ni-hard 4
	Impeller	: Bainitic Nodular
	Wearing plate suction side	: Ni-hard 4
	Shaft	: 42CrMo4
Hydraulics	: Drive	: Hydraulic motor
	Maximum required oil flow	: 200 l/min. (continuous)
	Continuous required oil pressure	: 250 bar (delta p)
	Motor speed with this flow	: Approx. 1,300 rpm
	Quick release coupling Snpatite:	
	Pressure	: 1 ¼" 75C20-20RP
	Return	: 1 ¼" 75N20-20RP
	Leak	: 1" 75N16-16RP
Pump performance	: Pump speed with max. oil flow	: Approx. 1,300 rpm
	Max. available power at pump shaft	: Approx. 80 kW
	Capacity DOP 150	: See QH curves
Jet water	: Discharge connection	: 80 mm
	Flange dimensions	: OD 200 mm; PCD 160 mm, 8x Ø18
	Advised minimum available capacity	: 125 m ³ /u, at 8 bar
Impeller	: The impeller is of a closed type with 3 vanes and is statically balanced. It is secured on the impeller shaft by a torque coupling. Sense of rotation, seen to the suction side: Clockwise .	
Sealing	: An oil lubricated mechanical seal seals the shaft.	
Working depth	: Maximum working depth for the standard executed DOP pump is -50 meters. However, greater working depths are possible after special adjustments.	
Execution	: - The suction pipe is provided with a suction mouth with 3 jet water nozzles and a dirt grid or alternatively with a flat suction head with jet water ring and dirt grid. - A protective casing, made of steel, is surrounding the dredge pump and hydraulic motor.	

- The hydraulic motor is suitable for continuous operation under and above the water.
- The hydraulic oil has to be cooled by means of a cooler on the power pack.
- The hydraulic valve block with the necessary built-in safety valves, is mounted on the hydraulic motor and provided with quick release hose couplings and contra couplings.

Conservation : Shot blasted SA 2.5, 1 layer of primer and one top layer.

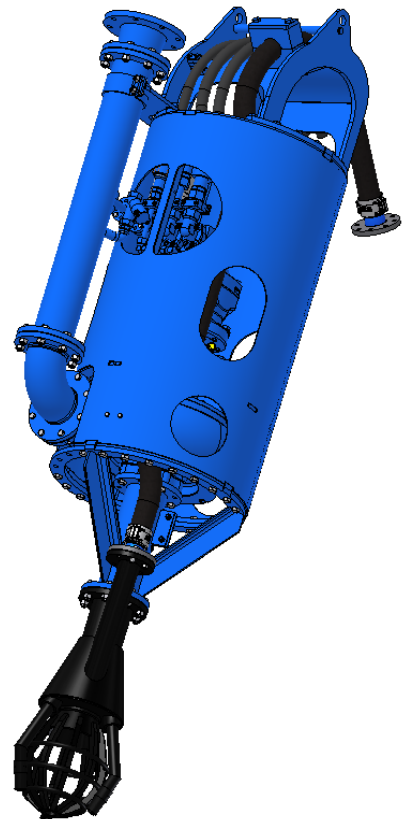
Tools : Impeller pressure piece, toolset mechanical seal, impeller hook.

Documentation : Instruction / maintenance manual in duplicate.

Maintenance : All pump parts are replaceable.

Transport dimension : - Weight approx. 1,100 kg.
- L x W x H, approx. 3,250 x 1,150 x 840 mm.

Options : - Suspension frame for the relieve of the (hydraulic) hoses.
- Hydraulically driven cutter unit or various other suction heads.
- Hydraulic hose set, flexible dredge hose and jet water hose.
- Diesel driven hydraulic power pack; or electrically driven.
- Jet water pump.
- Various dredging instrumentation.
- Various hoisting equipment.



Damen Dredging Equipment

P.O. Box 1021
3860 BA Nijkerk
The Netherlands

Phone +31 (0)33 247 40 40

Fax +31 (0)33 247 40 65

E-mail contact.dde@damen.com

Website www.dopdredgepumps.com